

WHAT IS CLAIMED IS:

1. A method for diminishing a residual N-vinyl compound monomer which comprises adding at least one acid to an aqueous solution of an N-vinyl compound polymer, wherein a gaseous  
5 phase in a reaction vessel is regulated so as to have an oxygen concentration of 5.0% by volume or lower.

2. The method as claimed in claim 1, wherein said acid is an organic acid having a boiling point of 140°C or higher.

10 3. The method as claimed in claim 1 or 2, wherein said acid is an organic acid having at least two carboxyl groups in the molecule.

4. The method as claimed in claim 1, wherein said N-vinyl compound is N-vinyl lactams.

15 5. The method as claimed in claim 1, wherein said N-vinyl compound is N-vinyl pyrrolidone.

6. A process for producing an N-vinyl compound polymer which comprises containing an organic base in an N-vinyl compound polymer to regulate pH of the polymer.

20 7. A process for producing an aqueous N-vinyl compound polymer solution which comprises adding an organic base to an aqueous N-vinyl compound polymer solution having a pH lower than 7.0 to thereby regulate pH of the solution.

25 8. A process for producing an N-vinyl compound polymer powder which comprises adding an organic base to an aqueous N-vinyl compound polymer solution having a pH lower than 7.0 to thereby regulate pH of the solution and drying the resulting

aqueous polymer solution.

9. The process of claim 6, 7 or 8, wherein said organic base is an organic base having a boiling point of 120°C or higher at ordinary pressure.

5        10. The process as claimed in claim 6, 7 or 8, wherein said N-vinyl compound polymer is obtained by adding organic acids having a boiling point of 140°C or higher at ordinary pressure to an N-vinyl compound polymer to thereby diminish an amount of residual N-vinyl compounds.

10       11. The process as claimed in claim 6, 7 or 8, wherein said N-vinyl compound is N-vinyllactams.

12. The process as claimed in claim 6, 7 or 8, wherein said N-vinyl compound is N-vinylpyrrolidone.